DOCUMENT RESUME

ED 215 456 EC 142 115

TITLE	Making School Programs Accessible to the Handicapped: A Guideline for New York State School Districts.
INSTITUTION	New York State Education Dept. Albany. Office for the Education of Children with Handicapping Conditions.
PUB DATE	Aug 81
NOTE	35p.
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Accessibility (for Disabled); Building Design; *Disabilities; Elementary Secondary Education
IDENTIFIERS	*Education for All Handicapped Children Act; *New York; Rehabilitation Act 1973

ABSTRACT

The booklet reviews Federal and New York State efforts to ensure that school programs are accessible to handicapped students and presents guidelines for making existing facilities, services, and activities accessible. The requirements of Section 504 of the Rehabilitation Act of 1973 and the Education for All Handicapped Children Act are reviewed in the first section. The second section considers the needs of handicapped and nonhandicapped students and of classroom teachers. Alternatives in making buildings and programs accessible touch upon redesigning equipment, reassigning classes or other services, and assigning aides. The booklet concludes with detailed specifications and standards for accessibility. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED215456

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

MAKING SCHOOL PROGRAMS ACCESSIBLE TO THE HANDICAPPED

A Guideline for New York State School Districts

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Joan Miles

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Office for Education of Children with Handicapping Conditions
Albany, New York 12234
August 1981

EC142115

THE UNIVERSITY OF THE STATE OF NEW YORK

Regents of The University (with years when terms expire)

1988	Willard A. Genrich, Chancellor, LL.B., L.H.D., LL.D., Litt.D., D.C.S., D.C.L.	Buffalo
1988	J. Edward Meyer, Vice Chancellor, B.A., LL.B.	Chappaqua
1986	Kenneth B. Clark, A.B., M.S., Ph.D., LL.D., L.H.D., D.Sc. ..	Hastings on Hudson
1983	Harold E. Newcomb, B.A., LL.D.	Owego
1982	Emlyn I. Griffith, A.B., J.D.	Rome
1983	Mary Alice Kendall, B.S.	Rochester
1984	Jorge L. Batista, B.A., J.D., LL.D.	Bronx
1986	Laura Bradley Chodos, B.A., M.A.	Vischer Ferry
1987	Martin C. Barell, B.A., I.A., LL.B.	Kings Point
1984	Louise P. Matteoni, B.A., M.A., Ph.D.	Bayside
1987	R. Carlos Carballada, B.S., L.H.D.	Arcade
1988	Floyd S. Linton, A.B., M.A., M.P.A., D.C.L.	Miller Place
1988	Salvatore J. Sclafani, B.S., M.D.	Staten Island
1982	Mimi Lieber, B.A., M.A.	New York
1985	Shirley C. Brown, B.A., M.A., Ph.D.	Albany

President of The University and Commissioner of Education
Gordon M. Ambach

Executive Deputy Commissioner of Education
Robert J. Maurer

Deputy Commissioner for Elementary, Secondary and Continuing Education

Assistant Commissioner for Education of Children with Handicapping Conditions
Louis Grumet

Director, Division of Development Support Services
Richard G. Hehir

Chief, Bureau of Program Development
Lawrence C. Gloeckler

Table of Contents

	Page
Introduction	1
The Concept of School Program Accessibility	2
Background	2
Expanding Roles	3
Meeting the Needs of Handicapped Pupils in Newly Accessible School Programs	5
The Needs of Handicapped Students	6
The Needs of Nonhandicapped Students	7
The Needs of Classroom Teachers	8
Guidelines for Accessibility	9
Alternatives in Making Buildings and Programs Accessible	11
Specifications and Standards for Accessibility for the Handicapped	13
Bibliography	18
Specifications	20
Special Devices Used by Handicapped Children	24
Accessibility Inventory	27

Introduction

Environmental and attitudinal barriers have segregated and restricted the handicapped child and adult from actively participating in the mainstream of public education. Inaccessibility has limited handicapped individuals' opportunities to lead full and independent lives and, until remedied, precludes any opportunity for them to "live and work in equality with their fellow citizens."

In the words of Professor ten Broek:

> "Movement, we are told, is a law of animal life. As to man, in any event, nothing could be more essential to personality, social existence, economic opportunity — in short, to individual well-being and integration into the life of the community — than the physical capacity, the public approval, and the legal right to be abroad in the land."

A concerted effort must be made on behalf of handicapped individuals to permit them to move about more freely in their schools, neighborhoods and communities. The immediate responsibilities are to make programs accessible so as to permit the handicapped to function as normally as their personal limitations will allow. Since school is the primary environment for most children, their success is contingent upon educators taking an affirmative approach to eliminating both attitudinal and physical barriers and assuring access to those activities that are integral to the development of life-style, culture and well-being.

The Department has published this document to provide local school districts and other public education agencies with some guidelines and suggested alternative approaches toward timely and cost-effective compliance with the spirit and letter of this mandate.

The first section of the document provides a background of Federal and State efforts to ensure that school programs are accessible to the handicapped. This section includes a statement of continuing need for public education agencies to attend to this task.

Secondly, considerable attention is given to the topic of modifying existing school facilities, services and activities for the purpose of ensuring program accessibility. Guidelines and standards for making programs accessible through the modification of facilities, services and activities in the school are presented. A suggested Accessibility Inventory is provided for school personnel to use in evaluating the extent to which facilities housing school programs allow or prevent handicapped persons access to these programs.

ten Broek, The Right to Live in the World: The Disabled in the Law Torts, 54 California Law Review 841 (1966).

THE CONCEPT OF SCHOOL PROGRAM ACCESSIBILITY

A discussion of school program accessibility for handicapped persons requires an understanding of what is meant by the terms "school," "school program" and "accessibility."

The SCHOOL encompasses the physical building, its internal and external architecture, landscaping, roadways, pathways and other facilities used in conjunction with the school program, as well as supplies and equipment used on the premises.

The SCHOOL PROGRAM includes the curriculum of required and elective courses of study, activities in which members of the community are required or are eligible to participate for purposes of education, community service or social and recreational satisfaction. The school social climate must be considered as part of its program. The quality of interpersonal relationships and attitudes will determine the success of its participants.

PROGRAM ACCESSIBILITY means that any person who is required or otherwise qualified and eligible to participate in or benefit from a school program is not hindered by extraneous barriers which would deny that person access to the program. The essence of the school is its program. The school buildings, supplies, equipment, and the interrelationships of persons in the school setting are merely the ways and means by which individuals gain access to the program. Program accessibility requires that the school facilities, supplies, equipment, and climates be barrier free to the extent that a person may benefit from a school program in which she/he is qualified or required to participate.

BACKGROUND

As part of the Rehabilitation Act of 1973 (P.L. 93-112) Congress enacted Section 504 which provides that "no otherwise qualified handicapped individual ... shall be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

The regulations pertaining to Section 504 also require that school districts place handicapped youngsters in educational environments with pupils who are not handicapped, unless it can be demonstrated that, despite the use of supplementary aids and services, integration of the handicapped youngster into the regular school environment cannot be satisfactorily achieved. This mandate was later addressed as the concept of "least restrictive environment" in the Education of All Handicapped Children Act of 1975 (P.L. 94-142) and, as a result, it became obligatory for school districts to make their facilities accessible to handicapped pupils who are otherwise qualified and able to participate in the programs of the school.

Timetable of Compliance

Incorporated into the regulations pertaining to Section 504 was a timetable that required districts to be in compliance within 60 days of their effective date (June 3, 1977) barring any need for structural changes. Local districts had until June 3, 1980 to effectuate any structural changes in their educational facilities required for compliance, provided these changes were to be made as expeditiously as possible.

Transition Plan

In the event that structural changes were necessary to provide a free appropriate public education in the "least restrictive environment," educational facilities were to submit a transition plan by December 2, 1977, outlining the steps necessary to complete such changes. The transition plan was to include:

- The identification of physical obstacles.
- A description of the methods to be used in making the facilities accessible.
- A schedule of steps to be taken in achieving full program accessibility.
- Identification of the person responsible for implementing the plan.

The transition plan was to be a public document and available for public inspection.

EXPANDING ROLES

New York State's plan for the education of handicapped children emphasizes that programs and services be provided in the least restrictive environment. The successful achievement of the goal of integrating children into regular school environments and, with respect to the needs of individual children, providing opportunities to participate in the regular school program, depends a great deal upon the accessibility of school facilities.

Since the fall of 1978, the New York State Education Department, Office for Education of Children with Handicapping Conditions (OECHC) has been monitoring public and private schools which provide programs for handicapped pupils. This monitoring entails comprehensive site visits and program plan reviews including assessments of the extent to which school programs are accessible to handicapped pupils. Also, during this period members of the OECHC staff conducted a large number of training programs for local school Committees on the Handicapped, regular school building administrators and other persons concerned with providing educational programs for handicapped pupils in least restrictive environments.

However, these statewide monitoring and training efforts have revealed that a number of school districts have not yet achieved the goal of program accessibility and that school officials continue to have many questions and concerns regarding the attainment of such goals.

The movement toward integrating handicapped pupils into regular school settings and programs and the continuing existence of architectural and attitudinal barriers which render facilities and programs inaccessible, represents a continuing problem that must be resolved.

In attempting to rectify many of the concerns of program accessibility, the New York State Board of Regents in April of 1981 promulgated a new Part 200 of the Regulations of the Commissioner of Education to take effect July 1, 1982. Section 200.2(b) requires that each local school district's Board of Education adopt written policy which establishes administrative practices and procedures to ensure that pupils with handicapping conditions residing in the district have the oppor-

tunity to participate in school district programs, including extracurricular programs and activities, which are available to all other pupils enrolled in the public schools of the district.

The demands of society for increased adult and continuing education activities in the community have led to greater use of the school as a centrally located site with all necessary facilities for group activities. Most of these activities take place outside of regular school hours. As the handicapped citizen becomes more involved with such diverse activities as adult education, community programs, voting, senior citizen programs, board meetings, sports events, professional education meetings, inservice training and other meetings, community awareness of structural barriers is raised. The expanding role of educational facilities has placed additional demands on districts to make their facilities accessible. Districts which have assumed the responsibility of providing for adult education programs or which permit use of the facility for community functions must conduct such programs in accessible sites and provide classroom support where necessary.

MEETING THE NEEDS OF HANDICAPPED PUPILS IN NEWLY ACCESSIBLE SCHOOL PROGRAMS

Many school districts have accomplished making school programs accessible to handicapped pupils since the enactment of P.L. 94-142 and within the three-year period allowed for full compliance. This, combined with an increasing need to provide for the education of the handicapped within their home school buildings has resulted in many handicapped pupils returning to the regular education setting from schools which serve only children with similar handicapping conditions. This is particularly true of physically handicapped children - the orthopedically impaired, the blind, or deaf children - who can otherwise benefit from regular classroom instruction. It is also evident that many children who have previously been in the regular school setting, but placed in self-contained special classrooms, are now being given greater access to regular classroom programs.

While these observable events are totally in keeping with the need to make programs accessible to the handicapped, a variety of problems has arisen, particularly with respect to the attitudes and interpersonal relationships of all persons involved in the school.

The period of transition from a segregated to a regular school program environment, even with the availability of a resource room or support services, can be a difficult one for many handicapped students. Such a transition is also difficult for their nonhandicapped peers and their teachers.

Handicapped students may be faced with a myriad of problems resulting from previously being in segregated and/or restrictive environments. Such placements foster a number of detrimental behaviors that range from a heavy reliance on teacher support to poor interactional and social skills. The inability of handicapped youngsters to interact appropriately with their peers has subjected them to unnecessary ridicule and criticism due to a lack of understanding by their nonhandicapped peers. Other difficulties faced by the handicapped are related to environmental problems focusing on maneuverability and the need for additional space.

The inclusion of handicapped students into regular educational environments has created some problems for the nonhandicapped students as well. Some nonhandicapped persons may resent the attention and time spent by the teacher in helping the handicapped student adjust to a less restrictive environment. While handicapped students are having to adjust to their new environments, nonhandicapped students are having to adjust to students who appear to be different because of their reliance on adaptive aids and equipment or the need for a different methodology in the acquisition of educational skills.

Teachers approach the inclusion of a handicapped student into their classroom in a variety of ways. Many respond with a degree of uncertainty and trepidation due to a lack of knowledge of the needs of the handicapped pupil and of the classroom implications of different disabling conditions. Teachers are faced with the challenge of providing a milieu that supports the development of an indepen-

dent and responsible student who is capable of benefiting from a "mainstreamed" educational program and of interacting with peers in a socially appropriate manner. In attempting to meet this challenge, teachers frequently feel they are unprepared and unable to meet the individual needs of a handicapped youngster within the confines of existing program parameters.

The following sections provide suggestions for meeting the needs of handicapped students, their nonhandicapped peers and teachers to assist in successfully incorporating them into the educational environment.

The Needs of Handicapped Students

Active Participation and Leadership Roles

Attitudinal barriers and placement in segregated environments have precluded participation by many handicapped students and have contributed greatly to their lack of self-confidence. Consequently, few handicapped students have the self-confidence to project themselves as participants or leaders in group, classroom and school activities. Participation and leadership skills can be encouraged by rotating classroom responsibilities among all students equally.

Resource room personnel, teacher aides, and other students can provide the handicapped student with the necessary support to be an active participant in such classes as science, physical education, art, music, industrial arts and home economics.

Development of Independence

Much of the one-to-one assistance that handicapped students have frequently experienced has fostered a dependence on others that can interfere with the mainstreaming process. Teachers may need to develop an independence skills program to wean students of their dependence on teachers and remind them that they have the skills and abilities to be more independent. The importance of self-reliance may need to be emphasized, particularly its effect on life activities.

Personality Development

Lax and inconsistent behavioral management by parents and/or staff may create problems in the personality development of some handicapped students. Because of the lack of consistency and permissiveness by some adults, many handicapped youngsters have learned to manipulate adults rather than displaying proper behaviors in coping with problems or situational factors. It is suggested that when working with handicapped youngsters the same expectations and disciplinary rules be applied to the entire classroom in an equitable manner.

Dealing with Ridicule and Criticism

Experiential deprivation, poor interactional skills, and the need for aids and services may subject handicapped students to the ridicule and criticism of their nonhandicapped peers. The lack of opportunity for nonhandicapped students to interact with handicapped students has precluded any learning that can be gained from the interaction with peers who are different from themselves.

The teacher's acceptance of the differences and differing needs among all students sets the tone for the level of acceptance displayed by the class. Teachers should be aware that their projections and attitudes toward handicapped students are easily transferred to nonhandicapped students. The classroom teacher should be cautious that any constructive criticism or suggestions to handicapped students not be interpreted by nonhandicapped students as ridicule or negative criticism.

Mobility

Classroom environments should be arranged so that handicapped youngsters have free access to most areas in the classroom. Physically handicapped students should be able to go to bulletin boards, teacher's desk, bookcases, individual student storage compartments and window areas. Obstacles should be removed and handicapped students should be encouraged to move about the classroom as much as possible.

Adaptive Equipment

Physically handicapped students may require the use of adaptive equipment and aids to function in the classroom. Since the need for additional equipment may draw more attention to their differences and needs, handicapped students frequently hesitate to use such equipment. They should be encouraged to use the equipment or aid particularly when it was specially designed for their individual use and to assist them to become more independent. The hesitancy by handicapped students to use such equipment may require the assistance of other support staff to discuss the problem and to encourage their use.

Physically handicapped students may require additional space to store such assistive devices as lap boards, positioning wedges, head sticks, page turners, etc. Classroom teachers should make sure that additional storage and work space is provided to handicapped students to accommodate their needs and to permit them to function as independently as possible.

The Needs of Nonhandicapped Students

Student Interest and Implications of Disability

As a result of more intimate and direct contact with their handicapped peers, nonhandicapped students may find themselves more curious about different types of disabilities and may have a number of questions about the disabling condition of the handicapped student. The interest of students should be capitalized upon and incorporated into the curriculum. Various topics may include attitudinal and physical barriers, community agencies, disabilities, health care, etc.

Awareness and Attitudes

Prior to the acceptance of handicapped students by the nonhandicapped, students need to learn that their handicapped peers can make good friends and good classmates. They need to learn that having a handicap does not prevent someone from leading a full, satisfying and happy life with goals that may be very similar to their own.

An effort should be made by the classroom teacher to provide opportunities for the nonhandicapped students to learn about the disabilities and difficulties encountered by their handicapped peers. Teachers can develop simulation activities incorporating the effects of the disability, or arrange for such activities as a puppet show that is designed toward interaction of handicapped and nonhandicapped, the sharing of feelings about themselves and how it feels to be handicapped. Many activities can be expanded to include competitive situations such as wheelchair sports where the nonhandicapped have the opportunity to learn that there are many things the handicapped can do.

New Responsibilities

Nonhandicapped peers may need to learn that they also have a role to play in providing the handicapped student with the necessary support to be active participants in the classroom. Handicapped students may need to be paired off with nonhandicapped peers when undertaking science, home economics or shop activities that might require more physical dexterity and coordination than the handicapped possess. Students need to learn that most life activities require cooperation and dependence upon one another and that the handicapped student may need some additional considerations in attempting to benefit from regular education program activities.

The Needs of Classroom Teachers

Inservice Training and Support

School districts should make available to classroom teachers the opportunity for support through consultation and inservice training. Although not required to provide the training directly, school districts should arrange with their local Special Education Training and Resource Center (SETRC) or local university to provide the necessary training. Teachers will be concerned with acquiring the techniques necessary to teach and manage the handicapped child in their classroom, as well as the classroom implications of the child's disability. During the transition period, both the classroom teacher and the handicapped student may also need support and encouragement from itinerant and resource room teachers and related service personnel.

Awareness of Space and Equipment Needs of Handicapped Youngsters

Teachers should be aware that with the inclusion of handicapped students into their classrooms, such students may require adaptive or special equipment to permit them to function more independently. Sufficient space to accommodate the equipment needs of youngsters should be planned and provided for. The appendix includes a list of special devices used by handicapped youngsters.

Communication and Transitional Realities

Attempts to establish a good rapport and continuous communication with parents should be made by teachers. Techniques and methods that teachers and parents have found workable at school or at home should be shared. The teacher should feel free to solicit the help of parents when special needs arise while the gains and difficulties alike should be shared between family and school.

As handicapped students make the transition to less restrictive environments, they may experience academic difficulties. This information should be shared with parents and youngsters as soon as possible to avoid unnecessary discouragement at the slower rate of academic gain that may be made initially by handicapped students when integrated with their nonhandicapped peers.

Handicapped youngsters should be judged against themselves prior to being compared against the academic performance of their peers.

Related and Support Services

Physically handicapped students may be in need of related and support services to enable them to function in a regular class. A physically handicapped student may require assistance from an aide or another student, the use of an electric typewriter or special transportation. In many cases, a physically handicapped student can function in a regular classroom with the support of an itinerant or resource teacher. Adequate time should be arranged by the classroom teacher to permit handicapped students to work with the resource teacher. Resource program time should be adequate to meet the individual student's needs and be reflected in the IEP.

Any service required or needed by a handicapped student should be incorporated and implemented through the IEP process. The classroom teacher should be an active participant in any planning and discussion regarding their handicapped students. Completion of Phase II of the IEP should ensure implementation of the recommended program.

GUIDELINES FOR ACCESSIBILITY

For districts to achieve program accessibility, a number of options other than major renovations are permitted. Structural modifications of existing facilities need to be undertaken only where other methods are inadequate to ensure that a program is available to handicapped persons. School districts should consider the following in planning to achieve program accessibility.

Facilities

Ramps, elevators, or other devices to remove physical barriers are not required to be provided in every building or in every part of a single building. To accomplish program accessibility, school districts may consider alternatives including the redesign of equipment, provision of teaching aides, moving classes to other locations or the alteration of some existing buildings.

Handicapped students who need to be placed in a separate facility must be afforded the same educational opportunities as those offered nonhandicapped students. Handicapped students should have the same opportunity to pursue courses of study, obtain guidance, counseling and placement services, participate in physical education courses, sports and other recreational activities, obtain support services and pursue their individual interests and personal and occupational goals.

Facilities and areas that are considered key or critical to ensuring program accessibility are: vocational-technical laboratories and shops, science laboratories, gymnasiums, auditoriums, classrooms, school libraries, guidance, counseling and

placement offices, rest rooms and water fountains. In lieu of major renovations, less expensive alternatives should be considered, such as relocating classroom areas or building ramps to ensure accessibility. Laboratory, shop and science areas should be designed and constructed so that handicapped students have full access to work and surface areas, to water and to safety materials as well as free mobility within the area. Shop equipment should be placed on lower work benches or stands so that nonambulatory students have adequate reach to operate the equipment as well as the necessary adaptations to operate the equipment safely and independently. Since physical education or adaptive physical education is part of the mandated curriculum and is required for all students, accessible areas must be provided for such programs.

Areas such as rest rooms that are necessary for health and physical care, or access areas that include water fountains, must be accessible to handicapped students.

Services

Handicapped students may require the use of aids, benefits and services to meet their individual needs and to assist them in functioning adequately in a regular class or alternative placement. Adapted equipment, specialized instructional materials or developmental corrective, related and support services may be necessary to assist a child to benefit from an educational program.

Other support services are defined as those which provide any appropriate assistance needed for a handicapped student to attend a regular or special class program. Such support services are determined by the Committee on the Handicapped and may include:

- Interpreters for hearing impaired students,
- Readers for students with visual impairments,
- Notetakers for students who are hearing impaired or those who cannot write because of a physical reason,
- Tutoring for students who require additional or remedial instruction.

Activities

It is the intent of law that the educational needs of handicapped students be appropriately served in a setting that permits maximum integration of handicapped and nonhandicapped persons. As with other services and programs, handicapped students must be permitted the same opportunity to participate in extra-curricular activities. Recreational opportunities, sports and special interest clubs must be made available to handicapped as well as nonhandicapped students. Handicapped students must be provided the opportunity to try out for interscholastic and after school sports programs. It is not recommended that schools reduce their standards for handicapped students. Rather, no student may be denied access to any school activity based solely on the fact that s/he is handicapped. Students should be accepted or rejected on their ability and not on their disability. If transportation for extracurricular activities is provided for nonhandicapped students, it must also be provided to handicapped students.

Functions or services that are conducted for the general student population, such as school assemblies or library services, should be located in accessible areas. Providing library services to handicapped students may necessitate assistance in locating and checking out needed materials. The availability of academic advisement, career guidance, personal and family counseling and job placement shall be comparable to those services provided to nonhandicapped students.

Providing separate or different programs, activities or services to handicapped individuals is discriminatory unless they are necessary to achieve equal opportunity and are considered the most integrated setting appropriate for that student. Where a child must participate in a separate or different program s/he must have the option of participating in those programs or activities that are not separate or different if s/he can benefit from that program with the assistance of aids or services.

Programs provided to meet the educational needs of the handicapped child need not be identical but must afford an equal opportunity to achieve equal results. The provision of an aid, benefit or service is not intended as a guarantee to achieve equal results or reach the same level of achievement as nonhandicapped students.

It is important to reiterate that common sense and discretion are important elements in meeting the requirements of program accessibility. Creative solutions by school district personnel are encouraged so that accessibility can be accomplished in reasonable and cost-effective ways.

ALTERNATIVES IN MAKING BUILDINGS AND PROGRAMS ACCESSIBLE

Redesign Equipment

Innovative ideas in redesigning equipment may make a program accessible to a handicapped child. Mounting a desk on blocks to accommodate a wheelchair, adding "wing" handles on equipment, building a platform so that someone in a wheelchair may reach laboratory materials or redesigning lab space so that someone may wheel under a working surface are all examples of redesigning equipment and/or furniture. Installing special furniture for people on crutches may be all that is necessary to make a program accessible.

Schools providing work-study programs for students must ensure that the same opportunity is available to handicapped students. A work-study program, which includes as one of its office tasks photocopying or use of office equipment, must make that equipment accessible to handicapped students for their use.

Reassignment of Classes or Other Services

Schools may reassign classes or other services to accessible parts of the building. Certain grade levels at either the junior or senior high school may presently be housed in inaccessible wings. The location or reassignment of certain classes to ground floor or accessible levels would make such programs accessible.

Pupil personnel services such as guidance, counseling and speech improvement, which are frequently provided on an individual basis, may be provided at alternative sites that are accessible.

Assignment of Aides

The assignment of aides to assist handicapped youngsters is another method which may be utilized in making programs accessible. An example of providing assistance to a handicapped student is to assign a teacher aide to a student to manipulate science equipment, to assist a student to get from class to class or to assist a student in carrying out some basic functional needs when unable to do so independently. Schools may also assign aides to assist the visually and mobility impaired in obtaining library materials or to become active participants in a regular or adaptive physical education class.

School districts should be aware that carrying youngsters in wheelchairs is not a practice supported by the State Education Department. This practice is viewed as being unsafe as well as demeaning to students who are confronted with having to be carried to get to the program or building.

Delivery of Health, Welfare or Other Social Services

Although not applicable to most handicapped children, if a handicapped adult is seeking health, welfare or social services and such services are presently provided in an inaccessible site that would require extensive alteration to the existing facilities, the service provider may have the option of referring the handicapped person to another provider of the same services that is at an accessible site. The referring party does have the obligation of determining that the other provider is accessible and is willing to provide the services.

Alteration of Existing Facilities

The construction of a simple wooden ramp, the cutting of curbs and the widening of bathroom doors at relatively low cost may be all that is necessary to make a facility accessible. Even though a building may be new, there are frequently a few steps which can be rectified by building a relatively inexpensive ramp. School districts should consider the personnel within their maintenance, building and grounds staff to handle some of the renovation needs of the buildings. Districts can avoid costly contracts for renovation by utilizing existing staff and referring to the enclosed specifications and standards.

It is suggested that the school district consult with handicapped community members when considering what alterations may be required to make a building accessible. The experiences of the handicapped can be valuable not only in assessing such facilities, but also in providing creative solutions to alterations in inexpensive ways.

Construction of New Facilities

All new construction is required to be barrier-free and totally accessible to the handicapped. Districts should be familiar with the American National Standards Institute (ANSI) specifications.

Summary

Program accessibility implies that a program or activity is accessible to handicapped persons. A flexible approach should be taken by districts to achieve accessibility and full participation for handicapped persons without renovating every existing classroom building or program site.

To achieve program accessibility, a district may utilize any of the following methods:

- Redesign equipment,
- Reassignment of classes or other services to accessible parts of the buildings,
- Assignment of aides to assist handicapped youngsters,
- Home visits,
- Delivery of health, welfare, or other social services at alternate accessible sites,
- Alteration of existing facilities,
- Construction of new facilities which are barrier free,
- Any other methods that result in making its program activity accessible to handicapped persons.

Structural changes are required only when there is no other feasible way to make a program or activity accessible. Discretion and common sense should be taken when attempting to meet the mandates of program accessibility.

When undertaking new construction, districts should incorporate the concept of barrier-free environments. This means that the minimum standards developed by the American National Standards Institute are used when renovating existing buildings to meet compliance standards. The standards that are critical to making buildings minimally accessible are included in the following section.

SPECIFICATIONS AND STANDARDS FOR ACCESSIBILITY FOR THE HANDICAPPED

The following standards and specifications have been compiled from information published by the American Foundation for the Blind and the American National Standards Institute. Certain elements were selected as being most critical for making buildings and facilities accessible for use by the handicapped. Most of the standards and specifications listed pertain to the interior elements of buildings. For those areas of need not referred to in this section, the booklets entitled, Environmental Modifications for the Visually Impaired: A Handbook and The American National Standard: Specifications for Making Buildings and Facilities Accessible to and Usable by Physically Handicapped People should be referred to. A number of exterior elements, although not included, are important elements in making environments totally accessible. Specifications on street crossings, islands, outdoor furnishings, plantings and obstacles should be taken into consideration when planning and developing the outdoor environment.

A. Doors

Doors should have a clear opening no less than 32 inches with the door open 90 degrees. When access routes are to accommodate visually handicapped students with a sighted guide or a guide dog to pass side by side, doors should have a clear opening of 48 inches.

Thresholds should be flush in most cases or with a rise not to exceed ½ inch. Should raised thresholds exist, they should be color cued (a color contrast for the visually impaired or partially sighted.)

Glass doors should have contrasting frames so that a visually impaired or partially sighted person has some way of identifying them as glass doors.

The maximum force for pushing or pulling a door should be as follows:

a. Exterior hinged doors: 8.5 lb f

b. Interior hinged doors: 5 lb f

c. Sliding or folding doors: 5 lb f

Automatic or power-assisted doors should not open to back check faster than 3 seconds and should require no more than 15 pounds of force to stop door movement.

To accommodate the blind, visually impaired or partially sighted person, automatic doors should have guard rails, power floor mats, push or kick plates, horizontal or vertical sensing devices and the doors should remain fully open until the area is cleared by the user.

B. Ground and Floor Surfaces

A stable, hard and regular surface is recommended for those individuals who are semiambulant, who have difficulty in walking and maintaining their balance, or who use wheelchairs. Soft, loose, or irregular surfaces make movement difficult for the mobility impaired.

Cross slopes on walks and ground or floor surfaces should be avoided because of the difficulty in controlling movement in a wheelchair as well as maintaining a straight line.

Carpeting may be used in lightly traveled areas if properly selected and installed without pads or cushions. Soft, thick, warped or humped carpets should be avoided.

Tactile floor signals or warning systems should be used only where hazardous situations may exist such as an entrance to a stairwell or access to a vehicle loading or unloading area. The tactile floor system should be slightly raised from the surface, grooved, consist of a change in surface hardness and be grossly different. It should cover a large enough area, appear sufficiently in advance and be consistent throughout the premises.

C. Lighting

Many visually impaired or partially sighted persons are extremely light sensitive. Glare and reflections should be avoided whenever possible.

Lighting should be used in hazardous or critical situations to accentuate stairs and frequently used areas such as rest rooms.

D. Stairs

Steps should have uniform riser heights and uniform tread widths. Stair treads should be a minimum of 11 inches wide. The underside of nosings should not be abrupt and the radius of curvature at the edge of the tread should be no greater than ½ inch.

Stairways should have handrails at both sides of all stairs and should be continuous along both sides of stairs. If handrails are not continuous, they should extend at least 12 inches beyond the top riser and at least 12 inches plus the width of one tread beyond the bottom riser.

Tactile warning signals for visually impaired or partially sighted persons should indicate stairways leading down in the middle of a walk or corridor and should also indicate changes in floor level.

Other suggestions to assist the visually impaired or partially sighted person include raised or recessed numbers. Braille numbers could be standardized on the handrails to identify floor number. Doors to stairway and ramps should have tactile lettering for identification.

E. Elevators

Elevators should be conveniently located in relationship to the lobby and on an accessible route. Elevator operation should be automatic with a self-leveling feature that automatically brings the car to floor landings within a tolerance of ½ inch.

Call buttons in elevator lobbies and halls should be centered at 42 inches above the floor.

Elevator control panels should have buttons at least 3/4 inches in their smallest dimensions, and should be designated by raised or indented standard alphabet characters for letters, arabic characters for numerals or standard symbols. All raised or indented designations for control buttons should be placed immediately to the left of the buttons to which they apply. All floor buttons should be no higher than 54 inches above the floor.

Automatic doors must be timed to remain open 3-4 seconds.

Audible elevator signals should sound once for up directions and twice for down directions. The shape of the arrow should be a visible signal.

Wheelchair or platform lifts will not be approved by Facilities Planning of the New York State Education Department as a means of making a building accessible for wheelchair users.

F. Emergency Exits

Accessible routes to emergency exits must be well marked with tactile and audible warning systems. Emergency exit door openers should also have tactile warning systems.

G. Bathrooms

Floor space around toilets should be open enough to allow either a left-handed or right-handed approach. Toilet heights should be between 16 and 17 inches for younger students at the elementary level. Grab bars in the toilet stall should be placed on a side wall and the back side approximately 33 to 36 inches from the floor. Toilet stall doors should be 32 inches wide and should swing outward.

Sinks should be mounted with the counter or rim no higher than 34 inches from the floor. Knee clearance that is 27 inches high, 30 inches wide and 19 inches deep should be provided underneath sinks.

Soap and towel dispensers and mirrors should be placed within reach of wheelchair users.

Signs on restroom doors should be marked differently for men and women to allow for easy identification by visually impaired or partially sighted persons. These signs should be at least 8 inches in height and in sharp contrast with door color.

H. Telephones

Public telephones should be conveniently located in public access and lobby areas. They should be mounted on walls or in enclosures without doors in such a manner that bases, enclosures and fixed seats do not interfere with wheelchair users.

Clear floor space for wheelchair users should be at least 30 inches by 48 inches which would allow for a forward or parallel approach. The highest operable part of a telephone should be no higher than 54 inches above the floor.

To accommodate hearing impaired individuals, there should be at least one telephone with a receiver that generates a magnetic field in the area of the receiver cap or with a volume control.

Telephones should have push button controls where service for such equipment is available.

Telephone controls and directions for use should be illuminated with lighting comparable to reading light.

Public telephones should not protrude into minimum corridor width.

I. Drinking Fountains

At least one water fountain should be on an accessible route and should have a minimum clear floor space of 30 inches by 48 inches to allow a person in a wheelchair to approach the unit facing forward. The spout should provide a flow of water at least four inches high so as to allow the insertion of a cup or glass under the flow of water.

Wall mounted units should have a clear knee space between the bottom of the apron and the floor of at least 27 inches high and 17 inches to 19 inches deep.

J. Signs

If accessible facilities are identified, the international symbol of accessibility should be used.

Graphic information should be positioned within the angle of view taking into account that many persons have severely reduced peripheral vision.

The standards for Signs and Symbols should be adhered to for visually impaired or partially sighted persons.

K. Alarms

If emergency warning systems are provided, they should include both audible and visual alarms.

L. Tactile Warning

Tactile warning textures on walking surfaces should consist of exposed aggregate concrete, rubber or plastic cushioned surfaces, raised strips, or grooves. Tactile warnings should be on doors to hazardous access, at stairs, at hazardous vehicular areas and at reflecting pools.

M. Curb Ramps

Curb ramps should be provided wherever an accessible route crosses a curb. The minimum width of a curb ramp should be 36 inches, exclusive of flared sides. Built up curb ramps should not project into vehicular traffic lanes. They should also include a tactile warning texture extending the full width and depth of the curb ramp, including any flares.

N. Ramps

Any part of an accessible route with a slope greater than 1:20 should be considered a ramp. The maximum slope of a ramp in new construction should be 1:12. The maximum rise for any ramp run should be 30 inches and the minimum clear width of a ramp should be 36 inches. If a ramp run has a rise greater than 6 inches or a horizontal projection greater than 72 inches, it should have handrails on both sides.

Bibliography

1. American National Standard
   ANSI A 117.1 - 1980
   American National Standards Institute, Inc.
   1430 Broadway
   New York, New York 10018

2. Barrier-Free Design - Accessibility for the Handicapped
   Phyllis L. Tica, Julius A. Shaw
   Institute for Research and Development in Occupational Education
   Center for Advanced Study in Education
   City University of New York
   33 West 42nd Street
   New York, NY 10036

3. Barrier-Free Meetings: A Guide for Professional Associations
   AAAS Publication No. 76-7
   Martha Ross Redden, Wayne Fortunate-Schwandt, Janet Welsch Brown
   American Association for the Advancement of Science
   1515 Massachusetts Avenue, NW
   Washington, D.C. 20005

4. Civil Rights - Handicapped Persons - Education
   Section 504
   Self-Evaluation Guide
   Preschool, Elementary, Secondary and Adult Education
   Carol von Hippel, June Foster, Jean Lonberg
   Office of Program Review Assistance
   Office of Civil Rights
   330 Independence Avenue, S.W.
   Washington, D.C. 20201

5. Eliminating Environmental Barriers
   ABA Commission on the Mentally Disabled
   1800 M Street, N.W.
   Washington, D.C. 20036

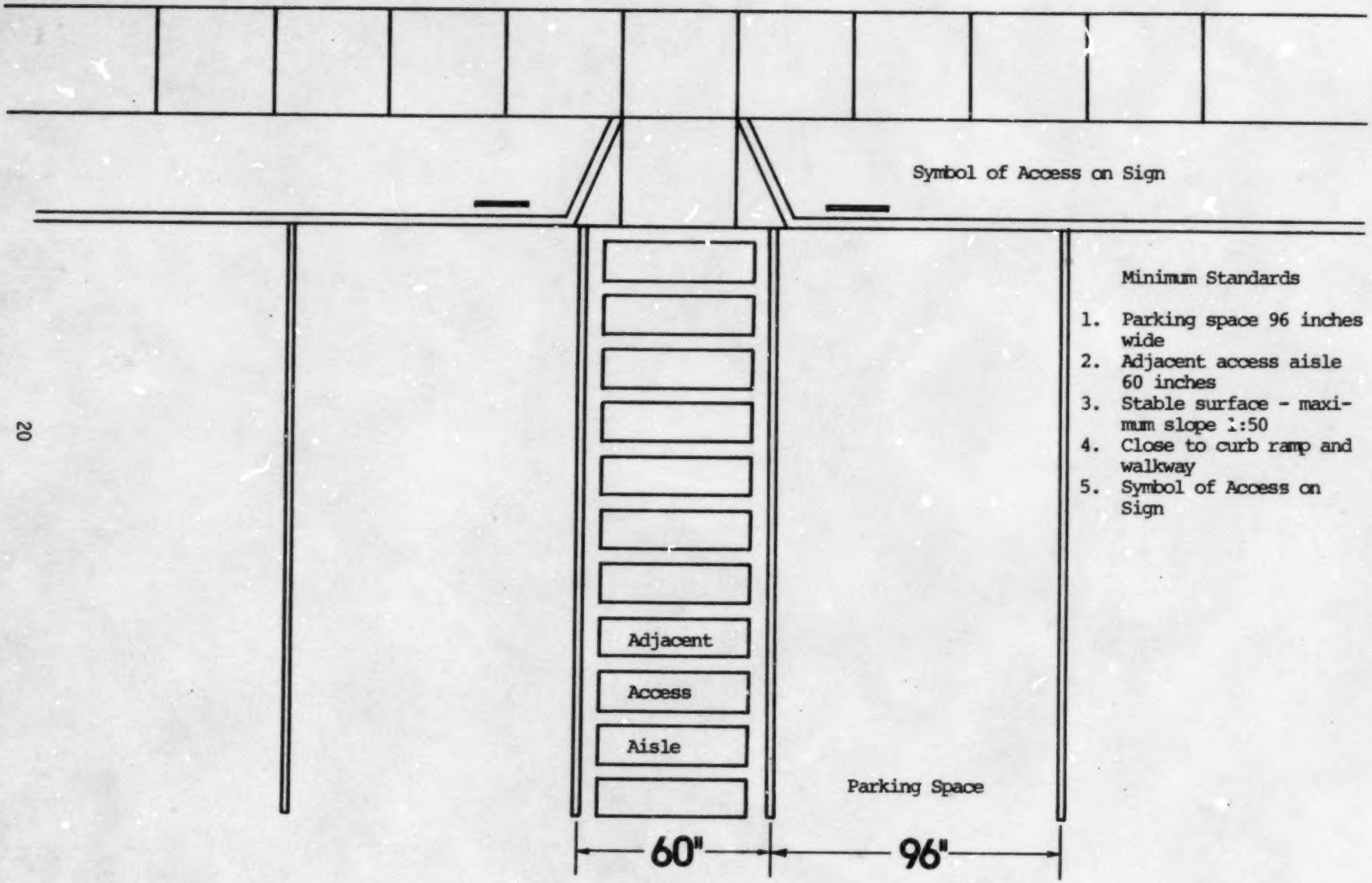
6. Environmental Modifications for the Visually Impaired: A Handbook
   Compiled by: John Duncan, Colaska Gish, Mary Ellen Mulholland, Alex Townsend
   American Foundation for the Blind
   15 West 16th Street
   New York, New York 10011

7. Opening Doors: A Handbook on Making Facilities Accessible to Handicapped People

   National Center for a Barrier-Free Environment
   Seventh and Florida NE
   Washington, D.C. 20002

8. Q and A 94-142 and 504: Answering Your Questions About P.L. 94-142 and Section 504

   National Association of State Directors of Special Education
   National Association of State Boards of Education
   1201 16th Street, Northwest
   Washington, D.C. 20036



Minimum Standards

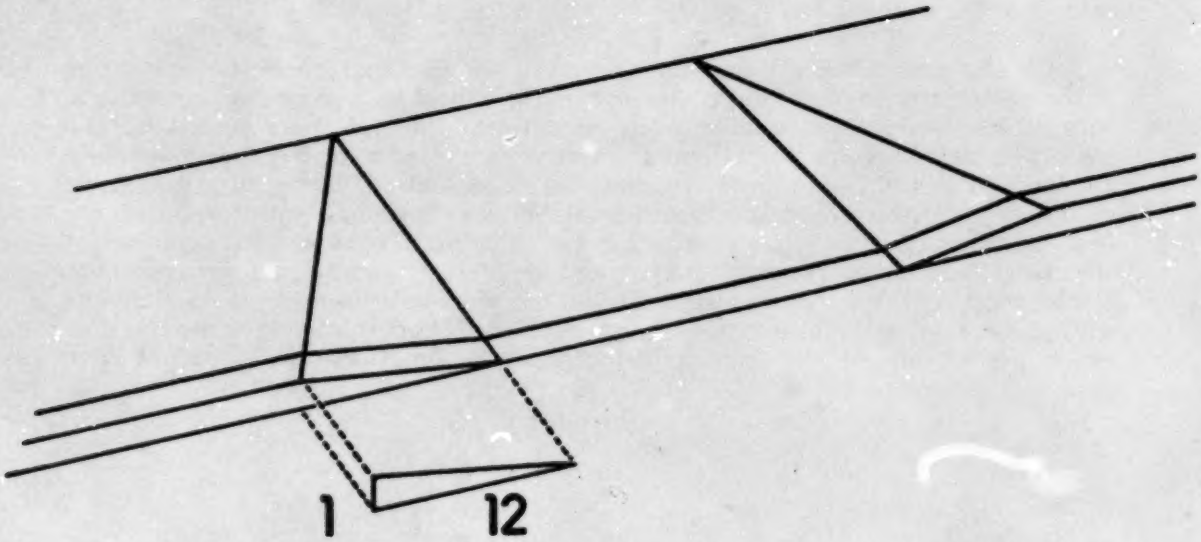
1. Parking space 96 inches wide
2. Adjacent access aisle 60 inches
3. Stable surface - maximum slope 1:50
4. Close to curb ramp and walkway
5. Symbol of Access on Sign

20

24

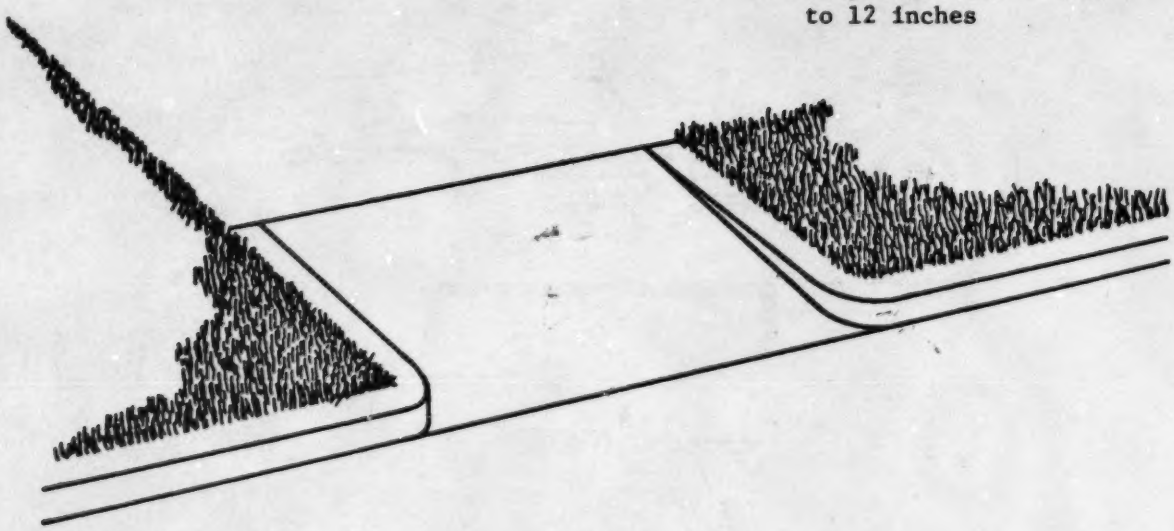
Specifications for Parking Area

25

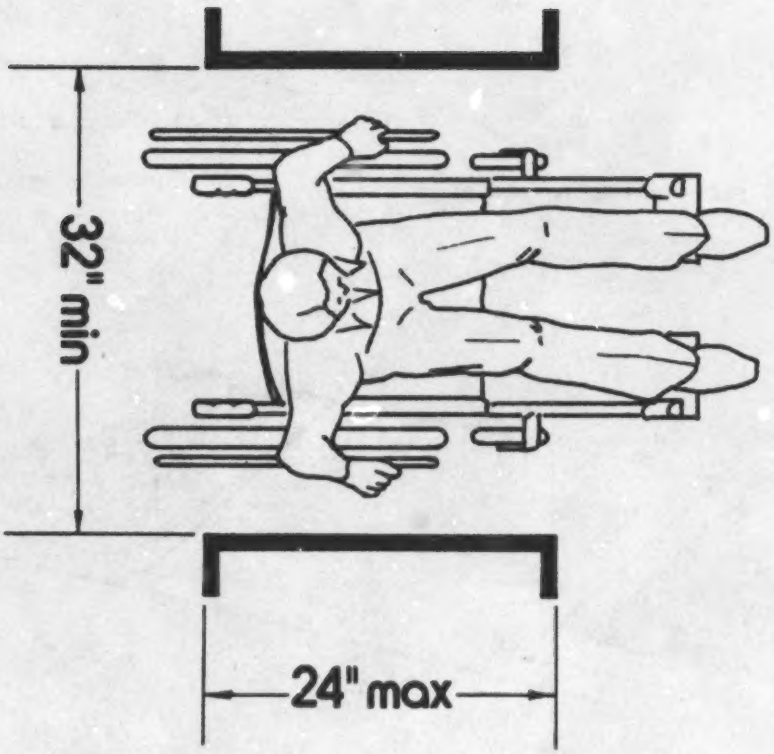


Minimum Standards

1. Minimum width 36 inches
2. Non-skid surface
3. Slope and rise 1 inch to 12 inches



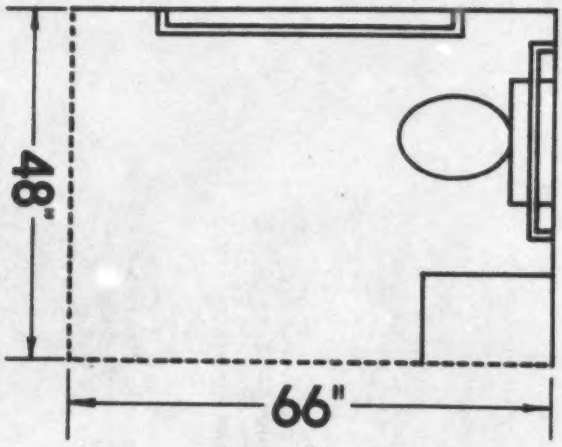
Specifications for Curb Ramps



Specifications For Doorway Widths

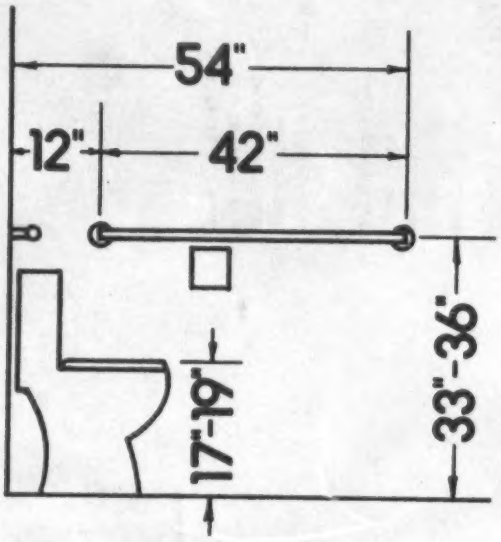
Minimum Standards

1. Doorway width 32 inches
2. Maximum doorway depth 24 inches



Minimum Standards

1. Clear floor space 48" by 66". Can be arranged for left-handed or right-handed approach.
2. Back wall and side wall grab bar at 33 to 36 inches height.
3. Toilet height 17 to 19 inches



Specifications for bathroom and toilet

Special Devices Used By Handicapped Children

Physically, visually and hearing impaired youngsters may be in need of assistive devices to function in the classroom. The following is a partial list of assistive devices that may be necessary for youngsters to function in the regular classroom.

	Physically Handicapped	Visually Impaired	Hearing Impaired
A. Adaptive Materials			
1. Tactile Aids	- felt tip pen - thick crayons - templates - large print - large lined paper	- braille writer, slate stylus - raised line drawing board - cubarithm slate - abacus - raised line paper - templates, writing guides	
2. Visual Aids	- bookstands - felt tip pens - large-type books - bold-line paper - page markers, reading windows	- bookstands - felt tip pens - acetate - lamps with rheostats - large-type books - bold-line paper - page markers, reading windows - sun visors, other shields	
3. Auditory Aids		- cassette tape recorders - talking book, other recording programs - variable speed attachments - speech compressors	
B. Positioning Devices	- inserts - lateral supports - wedge seat - pummel - cut-out hard seat - cushions - hard padded back - AB abduction straps - footrest with metal plate - head rest - straps - grab bars, dowels on lapboard		

	Physically Handicapped	Visually Impaired	Hearing Impaired
C. Assistive Devices	- wooden lapboard - Plexiglas board - angled lapboard - page turner - book stand - head stick		
D. Adaptive Activities Daily Living Devices	- splint devices for hand position - quad cuffs - adaptive utensils		
E. Communication Devices	Non-Electronic Communication Aids - lap boards - Plexiglas - eye transfer board Electronic Communication Aids - scanning devices - direct selection devices - recorded/synthesized speech aids - selection of interfaces		
F. Electronic Aids		- talking calculators - Optacon - closed circuit television	
G. Optical Aids		- glasses with special prescriptions - magnifiers - telescopic aids - microscopic aids	
H. Mobility Devices	- wheelchair - scooter boards - carts - walkers - canes - quad canes - crutches - para podium - electric wheelchair		

	Physically Handicapped	Visually Impaired	Hearing Impaired
I. Wheelchair Devices	- lapboard - lugs - brake extensions		
J. Auditory Aids			- auditory training systems - FM wireless units - close captioning devices - personal hearing aids - monaural or body aid on chest harness or carrier - binaural hearing aids - monaural hearing aids - batteries

Accessibility Inventory

Date of Report: _____

Building: _____

Address: _____

Telephone: _____

Building Principal or Contact Person: _____

Exterior Considerations:	PERSON IN NEED	COMPLIANCE YES	NO
• Parking and entrance for handicapped			
Clearly marked	(1) (2)		
Close proximity to building	(1) (2)		
• Ramped entrance if different from main entrance			
Clearly marked	(1) (2)		
Easily accessible	(1) (2)		
• Curb cut for wheelchair accessibility	(1)		
• Easily opened doors at entrance			

Interior Considerations:	PERSON IN NEED	COMPLIANCE YES	NO
• Width of corridors sufficient	(1) (2)		
• Nonslip and hard surfaced floors	(1) (2)		
• Tactile warnings (texture changes)	(2)		
• Proper height of drinking fountains	(1) (2)		
• Emergency exits (not including elevators)	(4)		
• Auditory signal elevators	(2)		
• Proper height of telephone	(1) (2)		
• Telephone with FM dial	(3)		

Lavatory Considerations:	PERSONS IN NEED	COMPLIANCE YES	NO
• Location of accessible bathrooms clearly marked	(1)		
• Close to meeting room	(1) (2)		
• On the same floor	(1)		
• Easily opened doors	(1) (2)		
• Stalls with			
Wide doors (28" - 32")	(1)		
Support handles	(1)		
doors swing outward	(1)		
• Proper toilet height (17" - 19")	(1)		
• Sinks with			
Water control levers	(1)		
Proper height	(1)		
Easy to reach soap, towels, etc.	(1) (2)		

* Persons in need

Elements pertinent to specific handicapping conditions

(1) Physically Handicapped
(2) Visually Handicapped
(3) Hearing Impaired
(4) All Handicapping Conditions